

Currently Pending Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A resin composition, comprising:
a thermoplastic resin; and
an oxidized compound having a hydrophobic group and a polar group which
are directly bonded to a surface thereof,
wherein the oxidized compound is at least one selected from the group
consisting of silica, titania, alumina and zirconia, and the hydrophobic group is a group –OR,
in which R represents a non-polarized group.
2. (Original) A resin composition according to claim 1,
wherein the polar group includes a hydroxyl group.
3. (Original) A resin composition according to claim 2,
wherein the polar group includes a polar group other than the hydroxyl group.
4. (Original) A resin composition according to claim 3,
wherein a percentage of the other polar group is 50% or more based on the
whole polar group.
5. (Original) A resin composition according to claim 3,
wherein the other polar group is at least one selected from an amino group, an
ether group, an ester group, a nitro group, a cyano group, and an epoxy group.
6. (Original) A resin composition according to claim 1,
wherein a percentage of the hydrophobic group in the oxidized compound is
within a range of 30 to 70% based on the whole of the hydrophobic group and the polar
group.
7. (Previously presented) A resin composition according to claim 1,

wherein the R is at least one selected from an alkyl group, an allyl group, and an aryl group.

8. (Original) A resin composition according to claim 1, wherein a length of at least one side of the oxidized compound is within a range of 1 to 200 nm.
9. (Original) A resin composition according to claim 1, wherein a length of the longest side of the oxidized compound is 380 nm or less.
10. (Original) A resin composition according to claim 1, wherein an amount of the oxidized compound added into the thermoplastic resin is within a range of 1 to 60% by weight.
11. (Original) A resin composition according to claim 1, wherein the thermoplastic resin includes acrylic resin and/or methacrylic resin.
12. (Original) A resin composition according to claim 1, wherein the thermoplastic resin is polycarbonate resin.
13. (Canceled).
14. (Withdrawn) A filler, comprising:
an oxidized compound having a hydrophobic group and a polar group on the surface thereof.
15. (Withdrawn) A filler according to claim 14, wherein the polar group includes a hydroxyl group.
16. (Withdrawn) A filler according to claim 15, wherein the polar group includes a polar group other than the hydroxyl group.
17. (Withdrawn) A filler according to claim 16,

wherein a percentage of the other polar group is 50% or more based on the whole polar group.

18. (Withdrawn) A filler according to claim 16,
wherein the other polar group is at least one selected from an amino group, an ether group, an ester group, a nitro group, a cyano group, and an epoxy group.

19. (Withdrawn) A filler according to claim 14,
wherein a percentage of the hydrophobic group in the oxidized compound is within a range of 30 to 70% based on the whole of the hydrophobic group and the polar group.

20. (Withdrawn) A filler according to claim 14,
wherein the hydrophobic group is at least one selected from an alkyl group, an allyl group, and an aryl group.

21. (Withdrawn) A filler according to claim 14,
wherein the length of at least one side of the oxidized compound is within a range of 1 to 200 nm.

22. (Withdrawn) A filler according to claim 14,
wherein the length of the longest side of the oxidized compound is 380 nm or less.

23. (Withdrawn) A method of producing a resin composition, comprising:
preparing a filler containing an oxidized compound having a hydrophobic group and a polar group on the surface thereof; and
dispersing the filler in a thermoplastic resin.

24. (Withdrawn) A method of producing a resin composition according to claim 23,

wherein the dispersing comprises: dispersing the filler in a solution containing a monomer constituting the thermoplastic resin; and polymerizing the monomer.

25. (Withdrawn) A method of producing a resin composition according to claim 23,

wherein the hydrophobic group and the polar group are formed by replacing a hydroxyl group on a surface of the oxidized compound by using a surface modifier.

26. (Withdrawn) A vehicle part comprising:
a resin composition including a thermoplastic resin and an oxidized compound having a hydrophobic group and a polar group on the surface thereof.

27. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is at least one selected from a molded exterior part, an outer plate, a wiper, a door mirror stay, a pillar, a window provided with a heating coil, a mirror, a lamp reflector, a cover in an engine room, a case in an engine room, a part in a cooling unit, a part which stores hydrocarbon fuels, and a container which stores hydrocarbon fuels.

28. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is a molded resin product, and
the molded resin product has a transparent part and an opaque part, and the resin composition is contained in at least the transparent part.

29. (Withdrawn) A vehicle part according to claim 28,
wherein the transparent part and the opaque part are integrally molded.

30. (Withdrawn) A vehicle part according to claim 28,
wherein the opaque part is formed by coloring with a pigment dispersed in the resin composition.

31. (Withdrawn) A vehicle part according to claim 28,

wherein the opaque part is formed by coating or printing before or after molding.

32. (Withdrawn) A vehicle part according to claim 28,
wherein the opaque part is formed by using a colored sheet.
33. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is a cover in an engine room or a case in an engine room, and
a resin composition-containing part in the cover or the case is transparent.
34. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is an integrally molded resin product having a hollow structure communicating with the air and/or a closed hollow structure.
35. (Withdrawn) A vehicle part according to claim 34,
wherein a gas, liquid, solid or a mixture of two or more thereof is packed and sealed in the hollow structure.
36. (Withdrawn) A vehicle part according to claim 34,
wherein the outermost layer of the integrally molded resin product is constituted by a decorative material.
37. (Withdrawn) A vehicle part according to claim 34,
wherein the integrally molded resin product is applied to an outer plate or an interior part for automobiles.
38. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is an integrally molded part which comprises two or more parts having different functions.
39. (Withdrawn) A vehicle part according to claim 26,

wherein the vehicle part is a molded product having a movable part and an unmovable part.

40. (Withdrawn) A vehicle part according to claim 39,
wherein the movable part and the immovable part in the vehicle part are formed integrally by two-color molding.

41. (Withdrawn) A vehicle part according to claim 39,
wherein the movable part is an openable/closable lid which regulates movement of a gas, and the unmovable part is a cylindrical molded product which introduces the gas.

42. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is a part which stores hydrocarbon fuels, and the part which stores the fuels constitutes a series of fuel parts for vehicles.

43. (Withdrawn) A vehicle part according to claim 26,
wherein the vehicle part is a container which stores hydrocarbon fuels, and the container which stores fuels constitutes a fuel tank for vehicles.

44. (Withdrawn) A vehicle part according to claim 43,
wherein the container which stores fuels is molded by blow molding.

45. (Withdrawn) A method of producing an integrally molded resin product, comprising:
preparing a resin composition including a thermoplastic resin and an oxidized compound having a hydrophobic group and a polar group on the surface thereof;
inserting the resin composition into a mold; and
injecting a pressurized fluid into the resin composition to form a hollow structure.

46. (Withdrawn) A method of producing an integrally molded resin product according to claim 45,
wherein the integrally molded resin product is formed with two resin sheets including the resin composition, and
the method further comprises:
heating the two resin sheets;
inserting the heated two resin sheets into the open mold;
injecting the pressurized fluid between the resin sheets before or after an outer periphery of the resin sheets is pressed to fuse the outer periphery thereof; and
closing the mold to maintain the pressure of the pressurized fluid in order to form the hollow structure while or after the resin sheets are distended.
47. (Withdrawn) A method of producing an integrally molded resin product according to claim 45, further comprising:
melting the resin composition;
injecting the melted resin composition into the closed mold; and
expanding the capacity of a cavity in the mold and simultaneously injecting the pressurized fluid into the melted resin composition to form the hollow structure.
48. (Withdrawn) A method of producing an integrally molded resin product according to claim 45,
wherein the integrally molded resin product is formed with one or two resin sheets including the resin composition, and
the method further comprises:
inserting the resin sheet into a cavity in the open mold;
closing the mold; and
expanding the capacity of the cavity in the mold while or after a melted resin is charged into the back surface of the resin sheet, and simultaneously injecting the pressurized fluid into the melted resin to form the hollow structure.
49. (Previously presented) A resin composition according to claim 3,

wherein a percentage of the polar group other than the hydroxyl group in the oxidized compound is within a range of 80 to 90% based on the whole of the hydroxyl group and the polar group other than the hydroxyl group.